

(FILE 'USPAT' ENTERED AT 12:52:35 ON 13 APR 1999)

L1            13 S (STOR? OR HALT) (P) JOB(P) POWER(P) OFF AND PRINTER#  
L2            2 S (STOR? OR HALT) (P) JOB(P) POWER(P) OFF(P) STATUS AND PRIN  
R#  
L3            2 S (STOR? OR HALT?) (P) JOB#(P) POWER(P) OFF(P) STATUS AND PRIN  
TER

=> d 1- 13 pn

US PAT NO:    5,832,331 [IMAGE AVAILABLE]                                  L3: 1 of 2  
US PAT NO:    5,812,821 [IMAGE AVAILABLE]                                  L3: 2 of 2

=> d 1- 14 pn

'L4' NOT FOUND

=> d 1- 12 pn

US PAT NO:    5,832,331 [IMAGE AVAILABLE]                                  L2: 1 of 2  
US PAT NO:    5,812,821 [IMAGE AVAILABLE]                                  L2: 2 of 2

=> d 1- 11 pn

→ US PAT NO:    5,875,345 [IMAGE AVAILABLE]                                  L1: 1 of 13 ←  
US PAT NO:    5,832,331 [IMAGE AVAILABLE]                                  L1: 2 of 13 ←  
US PAT NO:    5,812,821 [IMAGE AVAILABLE]                                  L1: 3 of 13  
US PAT NO:    5,791,790 [IMAGE AVAILABLE]                                  L1: 4 of 13  
US PAT NO:    5,768,483 [IMAGE AVAILABLE]                                  L1: 5 of 13  
US PAT NO:    5,659,302 [IMAGE AVAILABLE]                                  L1: 6 of 13  
US PAT NO:    5,419,440 [IMAGE AVAILABLE]                                  L1: 7 of 13  
US PAT NO:    5,163,122 [IMAGE AVAILABLE]                                  L1: 8 of 13  
US PAT NO:    5,086,497 [IMAGE AVAILABLE]                                  L1: 9 of 13  
US PAT NO:    5,018,078 [IMAGE AVAILABLE]                                  L1: 10 of 13  
US PAT NO:    4,930,911 [IMAGE AVAILABLE]                                  L1: 11 of 13  
US PAT NO:    4,689,639 [IMAGE AVAILABLE]                                  L1: 12 of 13  
US PAT NO:    4,197,797 [IMAGE AVAILABLE]                                  L1: 13 of 13

DRAWING DESC:

DRWD(10)

FIG. 9 is an explanatory view showing a mechanism of the **status** query according to the present embodiment; and

DETDESC:

DETD(10)

[8] **status** query function according to the present embodiment; and

DETDESC:

DETD(18)

The . . . a scanner function by using functions of the display section and the touch panel interacting with a user. Furthermore a **status** message required by the scanner/printer function can be displayed in the panel.

DETDESC:

DETD(45)

TABLE 1

Functions Contents of the functions

**Print queues**

A **print job** outputted from a plurality of WSs 103 function is time-sequentially queued.

**Job ID** A **job ID** is generated in response to the **print job**. generating function

**Job ID** A user ID and a connection ID for the **print job storage** are **stored**. function

**Message queue**

A message including therein the **job ID** received function from the scanner/**printer** controller 107 through the NIC 106 is time-sequentially queued.

**Job owner** The **job ID** of the queued message is checked, and a identifying

**job owner** is identified from the user ID and the function connection ID each corresponding to the **job ID**.

**Message send-**

In a case where the identified **job owner** exists on out function

the network, the message is immediately sent out to the corresponding client machine.

**Deleting** After the message is transferred, the function corresponding message, **job ID**, user ID and connection ID are deleted.

**Message** If the **job owner** identified by the **job owner**

processing  
specifying function does not exist on the network  
terminating  
101 due to a log out or a **power** being turned **OFF**,  
function the corresponding message is aborted and the  
processing is terminated.

Message queue  
If the **job** owner identified by the **job** owner  
function specifying function does not exist on the network  
101 due to a log out or a **power** being turned **OFF**,  
the corresponding message is maintained or **stored**  
in the message queue, and whether the identified  
**job** owner is logged in again or not is periodically  
checked, and when the log-in is checked, the  
message maintained or **stored** is immediately  
transferred.

**Print profile**  
**Print** profiles each for specifying **printing**  
maintaining  
conditions such as a paper pass, and a finishing  
function or the like are maintained or **stored** in a  
plurality of files.

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DETDESC:

DETD(59)

An engine driver exchanges a **status** with the copier engine section  
110, sets paper handling, starts up the printer/scanner, and makes  
communications with the operating panel. . .

DETDESC:

DETD(101)  
Printer **status**

DETDESC:

DETD(102)  
Scanner **status**

DETDESC:

DETD(225)  
[8] **status** Query Function according to the Present Embodiment

DETDESC:

DETD(226)

In both the network printer function and the network scanner function  
according to the system, a **status** and configuration as a MIB  
(Management Information Base) can be queried through the SNMP (Simple  
Network Management Protocol). The SNMP. . .

DETDESC:

DETD(227)

FIG. 9 shows a mechanism of the **status** query. The NIC106 returns the  
prepared data as it is as a response if there is a query (command) on. . .

DETDESC: